ENVIRONMENTAL PROTECTION AGENCY

IN RE: SUPERFUND PROGRAM

PROPOSED PLAN

MODERN LANDFILL, YORK COUNTY, PA

Verbatim transcript of public meeting held at
Eastern High School Auditorium,
Cool Creek Road, Wrightsville,
Pennsylvania, on Tuesday,

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CAPITAL CITY REPORTING SERVICE BOX 11908 FEDERAL SQUARE STATION HARRISBURG, PA 17108 TELEPHONE (717) 533-2195 MS. DEITZEL: Thank you very much for coming this evening. My name is Carrie Deitzel. I'm a Community Relations Coordinator for the U.S.

Environmental Protection Agency in Region III. With me this evening is Tony Dappolone who is our Remedial Project Manager for the Modern Sanitation Landfill Site; also a Section Chief for Tony's section — the western Pennsylvania Section — Jeff Pike; and Ken Thornton and Tim Alexander from Pennsylvania Department of Environmental Resources; and Alisa Harris, also from the Pennsylvania Department of Environmental Resources, is with us this evening.

EPA, as most of you know, is the Federal agency that endeavors to protect human health and welfare through protection of the environment, primarily from humans. It protects -- We have laws that govern activities, such as construction, development, manufacturing, etc. basically designed to protect the environment and directly to protect us.

The law that brings us here this evening is the Comprehensive Environmental Response, Compensation and Liability Act. This is an act that was passed by Congress in 1980 to address releases or potential releases of hazardous substances to the environment at locations that we consider to be abandoned or uncontrolled in 50000

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locations throughout the country.

The portion of the Modern Sanitation

Landfill Site that falls under the Comprehensive

Environmental Response, Compensation and Liability Act -which we call CERCLA for short -- is that portion of the
landfill that is unmined and basically at this point
inactive; and it has caused some contamination of the
environment. That's what we're trying to rectify
under the Superfund Program.

There is another portion -- a larger

portion -- of the landfill which is governed by another

law that EPA oversees, and that's the Resource

Conservation and Recovery Act. That act governs

operating facilities and monitors their day-to-day

activities.

The majority of the landfill is regulated by EPA through DER who oversees and permits the active facilities. That is not the portion of the landfill that we want to address tonight. We want to concentrate specifically on the unmined, inactive portion of the landfill governed by CERCLA.

Once a site is identified to the EPA as a potential hazardous waste site and is listed on the.

National Priorities List, that site becomes aligible for investigation and cleanup under the Superfund Program.

Modern Sanitation Landfill CERCLA portion was placed on the National Priorities List in 1986 and has been the subject of remedial investigation and feasibility study.

During a remedial investigation the agency or the responsible party generally hires a contractor who goes out and conducts multi-media investigations. They look at surface conditions and also subsurface conditions and identify the types of contaminants that are present and the ways that they might migrate into the environment and eventually to human receptors.

When the remedial investigation is completed a feasibility study which uses that data is done; and basically what we do during a feasibility study is to evaluate existing engineering technologies that can be used to address the conditions that were identified during the remedial investigation.

We have completed the feasibility study, and that data has been used -- or the information from the remedial investigation and the feasibility study have been used to develop a proposed plan, and that's what we're here for this evening.

The proposed plan is a summary of the remedial investigation and the feasibility study findings. It outlines all of the -- what we call the

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remedial alternatives -- all of the engineering technologies that were identified as being applicable to the conditions that were identified at the site. It tells you a little bit about each of those, and it describes the alternative that the EPA prefers for the cleanup of that site and those specific problems.

When we released the proposed plan which -
I believe in this case we released that on April 16 -
we open what we call a public comment period which

extends, in this case, until the 15th of May. During

the comment period we solicit input from people such

as yourselves -- people who are going to be affected

ultimately by the decision that we choose -- and we give

them an opportunity to tell us which of the alternatives

that have been determined to be applicable they prefer;

so in coming here this evening, we are soliciting your

opinions, and we will take all of those opinions -- in

fact, we're required by the Superfund Law to take your

opinion into consideration before we make a final

selection.

We have this evening a transcriptionist who will be making an official record of the meeting tonight; so we will be having a question and answer session after Tony makes a presentation.

If you have a comment that you would like to

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get on the record, we'd like to ask you at that time to please state your name for the record, and if you have an unusual name, it would be really helpful to the transcriptionist if you could spell it out for her.

After the close of the comment period, we will -- as I said, we will take into consideration any comments that we receive here tonight or any that come in by mail or by phone during the comment period. When you came in there were some documents that looked like this. In there you'll_find the address of the information repository, which should have another copy of this -- maybe a couple copies of this -- and the other documents related to the site. That repository is at the Windsor Township Municipal Building; so I'd suggest if you haven't picked one of these up, to pick one up on your way out. If you'd like to see any of the more technical studies, they are available at the Township Building. You can certainly go there and look at them. You're also welcome to come into the offices in Philadelphia and look at them there; and I believe probably in Harrisburg, as well. DER has all of the documents available to you.

You'll also find on here -- towards the back -- my name and phone number if you'd like to phone in any comments or if you have any questions in the AR500007

future during the remedial design or remedial action stage of this project -- you can give me a call.

I do want to suggest that if you didn't sign in on the sign-in sheet that's on the back table that you do so when you leave.

Following our Record of Decision, which is the document that will determine or identify the alternative that we select following the comment period, we will have to update another document which is at this point relatively out of date. It's called a Community Relations Plan, and it's required that following ROD that be updated, so if you sign in on that sheet it will be very helpful in terms of updating that to contact you or for any additional literature that we might produce over the R/D and R/A phase; and also, when you leave, there are some generic publications that give you some information about how Superfund works. Those I'd also suggest you pick up.

Now I think I'm going to turn things over to Tony Dappolone and let him tell you specifically what we're recommending and what the feasibility study did determine.

MR. DAPPOLONE: Thank you, Carrie. As Carrie mentioned, basically what I'd like to do is go through some of the highlights in the proposed plan

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which is available in the back of the room -- go through some of the technical details that were in the feasibility study and then talk about EPA's preferred alternative for this site; and then we'll answer any questions you may have.

Up here in the front of the room -- it may be hard to see from back there -- but there's an aerial photograph of the site itself, and some of the areas that I'll be showing on the overhead are better defined on here; so you might want to come up later and take a look at this.

Modern Landfill is in York County,

Pennsylvania. It is 362 acres of permitted facility. It

is an active landfill. For those of you who may not be

completely familiar, here is a relative location of the

site with York here and Lancaster in this area over here.

(Brief pause)

Modern Landfill is basically a municipal landfill. It's been in use since the 1940's.

Investigations were conducted by Pennsylvania Department of Environmental Resources, some private consultants and EPA; and some volatile organic compounds were discovered in the ground water and in some homeowner wells.

In 1986, the site was listed on the National Priorities List which is the list that allows

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Federal government to investigate Superfund sites. In 1987, a remedial investigation and feasibility study was commenced, and it was done under an administrative order between Modern Landfill and the State of Pennsylvania.

I'd just like to define a couple terms here that we'll be using later on. The CERCLA site, which is the Superfund site, is the original 66-acre unlined landfill which is owned by Horace Heindel and operated currently by Modern Trash Removal of York, Inc. It's the original 66-acre site, plus all the area up to and including monitoring wells on the site; and I'll show you those later and also show them on the map up there.

The property -- when we refer to the property -- is all the Modern property exclusive of the CERCLA site; so the CERCLA site is actually the Superfund part of the site. To give you a better feel for that, the dotted line boundary is the approximate boundary of the 362 permitted acres at Modern. The inside area here is the approximate boundary of the landfill.

Some of the components of the Modern

Landfill site are again, the 66-acre unlined landfill,

and that includes a 36-acre inactive area and a 30-acre

sythetic slope liner. There's also, contiguous to

the 66-acre area, a double lined landfill to the north

of the CERCLA site. There are an eastern and western perimeter groundwater extraction systems. The eastern system consists of thirteen wells and was installed in 1986; and the western system consists of fourteen wells installed in 1985. These extraction systems currently pump some of the contaminated groundwater from below the site out of the site for treatment.

There is a groudwater interceptor trench on the western side of the landfill, which intercepts leachate eminating from the site; and there is a state-of-the-art physical chemical waste water treatment plant on site, which treats the leachate and the groundwater that is removed from the site and discharges it through a tributary of Kreutz Creek.

Also installed at the site is a landfill gas extraction system, which extracts the methane gas that is generated by the landfill and burns it on site.

To get a better feel for the site, the central portion here is the 66-acre unlined landfill; the waste water treatment facility is toward the northern end of the landfill which, again, treats the groundwater and the leachate that's extracted from the system. This is the eastern extraction system -- groundwater exraction system -- and the western extraction system on the western side of the landfill.

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This slide will also give you a little bit
better feel for the location and the number of some of
the wells on this site. Not all of these wells are
extraction wells. Some of these are monitoring wells,
and some are extraction wells; but it gives you a feel
for the number and location of the wells that are
located around the landfill itself.

Back to -- Again, the site was listed on the NPL in 1986. The site was basically a municipal landfill, but some of the other constituents that were disposed of at the site -- they were gathered from records and interviews -- were paint waste, drums of PCBs, pesticide waste, oily wastes and some paper manufacturing sludges. Most of those items were removed when they were dumped. For example, the drums of PCBs were removed, and the pesticide waste was removed from the site.

As Carrie mentioned, the remedial investigation and the feasibility study were done for this site. The remedial investigation, basically, was a field study. What is done typically during a remedial investigation is that samples of soils, sludges, groundwater and surface water are taken, they're analyzed for various constituents, and various chemicals and hazardous substances are evaluated.

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The culmination of the remedial investigation is a risk assessment, which basically looks at the chemicals and other constituents of concern of the Superfund site and determines whether or not there is any risk to human health or the environment based on what is at the site.

Risk assessment was done for Modern

Landfill, and it considered various pathways -- ingestion,
inhalation -- of the hazardous substances. It looked at
various pathways such as direct contact and groundwater
ingestion.

The conclusions from the risk assessment -and again, the detailed information is available in the
administrative record -- are that the principal
contaminants -- that the only real risk at the site from
any of the hazardous substances was from potential
ingestion of groundwater on the site. The principal
contaminants in the on-site groundwater are those shown
on the screen: benzene, carbon tetrachloride,
1/2-dicholoroethene, 1,1-dichloroethene, tri-chloroethene,
and vinyl chloride; so these were the principal
contaminants at the site that drove the risk assessment.

In addition, when the groundwater contaminants were looked at -- there are standards called Maximum Contaminant Levels, which are standards that are

not to be exceeded in groundwater, and the ones that are -the constituents that are circled ---several constituents
exceeded the MCLs for the both the average and the
maximum values for the wells on the CERCLA site.

As a result of a risk assessment, what is done is the risk that's evaluated at the site is then quantified so that a person can determine what the real risk is to either human health or the environment; and there are two ways to do that. The first one is the calculation of the excess lifetime cancer risk, and this is an indication of what the risk of an individual developing cancer would be in excess of the normal rate. The excess lifetime cancer risk is a number that's used — the range for the excess lifetime cancer risk — it's acceptable to EPA as a number 10^{-4} to 10^{-6} . What that means is that a normal range of excess cancer is one in 10,000 to one in a million. That is an acceptable range that EPA begins to look at the risks to human health.

The excess lifetime cancer risk for groundwater ingestion on the CERCLA site at Modern Landfill -- for the average case it's 3×10^{-5} , and for the maximum reasonable case is 8×10^{-3} . This is in excess of EPA's acceptable range, which means that there is an excess risk of a person developing cancer from

ingestion of the groundwater on the CERCLA site.

Also, what is looked at is another measure called the hazard index. This is an evaluation of possible toxic effects to an individual from noncarcinogenic chemicals or substances; and generally, if the hazard index is greater than one it's an indication that there could be some toxic effects to humans based on the substances available at the site.

Again, for ingestion of groundwater from the wells on the CERCLA site the hazard index for the maximum reasonable case is greater than one; so there is a risk from the groundwater ingestion -- from ingestion of groundwater on the CERCLA site.

This is just to show that the excess lifetime cancer risk for groundwater ingestion off the Modern property is within the acceptable range as determined by EPA.

So the basic results of the remedial investigation and feasibility study are that there is a risk that exits at the Modern Landfill site, and that risk comes solely from ingestion of drinking water that is underneath the CERCLA site itself.

The remediation goals that we set for the site are to look at an action that will address the long-term, relatively low-level threat that exists at the

site that's caused by the unlined municipal landfill and seek to restore the groundwater under the site to beneficial uses. To do that we've come up with a set of groundwater remediation goals at the site. What we want to do is minimize and reduce the infiltration that gets through the landfill and to the hazardous substances underneath which cause them to wash out into the groundwater. That would also reduce the leachate production of the landfill. We want to restore the groundwater to beneficial use, and the goal in this case of beneficial use is to restore the groundwater to background water quality and do that by attaining background water quality standards at the site.

Now, as a result of the feasibility study -after the data's gathered and after we assess the risk at
the site, the feasibility study first looks at a range
of alternative that can be used to clean up the
particular site. We term that the screening of alternatives where we look at the general range of alternatives
that are available for a particular site.

For the Modern Landfill we looked at a no-action alternative, which basically does nothing; and one reason we do that is because it's required in the Superfund Law, and it also gives us a baseline to compare all of the other alternatives against.

We looked at such things as containment of the contaminants, removal, treatment and other ancillary actions such as monitoring -- groundwater and surface water monitoring.

After the screening of alternatives is done, the most feasible alternatives that are left are carried over into what we call a detailed analysis of alternatives. In the detailed analysis of alternatives we look at a variety of criteria, including implementability, protection of human health and the environment, whether or not they meet all the State and Federal laws, and we look at things such as cost and cost effectiveness, also.

I'm going to describe -- Basically there are four alternatives that we carried over into the detailed analysis, and I'm going to describe the four of them and their related cost. One thing we want to keep in mind with these costs is that approximately \$15 million of pre-1990 cost were expended by Modern Landfill to date and are not included in the costs of the four alternatives that will be described. These pre-1990 costs were such things as the groundwater extraction system that's already in place, the waste water treatment plant, and the partial cover and partial cap that's already completed at the site.

The first alternative is the No Action Alternative and basically, if the No Action Alternative were implemented, the existing groundwater extraction system would be shut off and no additional groundwater would be pumped or treated. The fence at the site would remain; however, there would be no maintenance for the fence. The groundwater monitoring would continue under the No Action Alternative.

This not a true no-action alternative, however, since some leachate and some contaminated groundwater have already been removed from the site, and there is a partial cap on the site already; so it's hard to say that this is a true no-action alternative in the sense that nothing would happen at the site.

The capital costs would be nothing,
because there would be no capital installation at the
site. The operation and maintenance for the groundwater
monitoring and the surface water monitoring would be
\$218,000; and the present worth of that alternative
would be \$3,398,000.

The second alternative is No Further Action.

The No Further Action Alternative would continue the operation and maintenance of the existing landfill cap.

It would continue the operation and maintenance of the gas extraction system, the groundwater extraction system,

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the waste water treatment plant, and the groundwater monitoring and surface water monitoring would continue.

What would not happen under this alternative is the existing landfill cap would not be completed, and the final cover on the landfill would not be completed. I'm sorry -- the landfill cap and the final cover would not be completed; however, there is a possibility that new groundwater monitoring wells would be installed even with this alternative so we can keep an eye on what is happening with the groundwater and contaminants.

The third alternative that was looked at in the proposed plan, marked as Alternative 2B, is Groundwater and Vapor Extraction Systems with an Additional Well and Final Cover. This is basically the same alternative as the previous one, except with this alternative the cap on the landfill would be completed, and the final cover would be completed thereby minimizing, or almost eliminating, most of the infiltration into the landfill; and an additional well would be installed under this alternative. In one minute I'll show the significance of that well.

The last alternative, again, is the same as Alternative 2B, except that under this alternative we would have even additional groundwater extraction wells

installed on the site.

The present worth of Alternative 2B is \$17,900,000 and of Alternative 2C is roughly \$18,000,000.

Well before I get into this, the last two alternatives that we discussed -- again, basically we would finish the cap on the unlined portion of the landfill, and we'd put the final cover over the landfill which would, again, eliminate -- or almost eliminate or almost completely reduce -- the infiltration into the landfill and therefore, the generation of the leachate and the contaminated water under the landfill.

The groundwater extraction systems would continue. The waste water treatment facility would continue to operate, and the groundwater and surface water monitoring would continue.

What is happening right now -- this is
the area of the landfill, and this is the direction of
the groundwater flow -- the same direction as the pointer.
The eastern and western extraction systems are removing
the groundwater in the lighter green areas that are
shown on the screen.

Under the last two alternatives that were mentioned here -- Alternatives 2B and 2C -- additional wells would be placed in these areas of the landfill to

ensure that none of the groundwater that was flowing to the north would escape the system; and again, if you remember from the earlier slides of the groundwater monitoring extraction wells, there are additional monitoring points virtually surrounding the landfill to ensure that none of the contaminated water is escaping from the area of the landfill.

The preferred alternative that's in the proposed plan and that EPA is recommending is Alternative 2C, which is the Augmented Extraction Systems Plus Final Cover. It's -- again, completion of the final cover and cap over the landfill, continuation of all the existing waste water extraction systems and leachate extraction systems, and the addition of the new wells to ensure that none of the contaminated groundwater escapes from under the area of the landfill.

Before we go into any questions, is there anything -- anything --

MS. DEITZEL: The only thing I'd like to do is remind you once again that we are doing an official record, so if you want to be entered on that record, please do give us your name; and also, I'd like to remind you one more time that we are focusing on the CERCLA portion of the landfill -- the unlined, inactive portion of the landfill site.

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Other than that, I think if anyone has anything to contribute, we'd be glad to hear you now. Are there any comments or questions? Yes.

MS. RUBY: My name is Sandra Ruby. I'

MS. RUBY: My name is Sandra Ruby. I'm the Township Manager with Lower Windsor Township. Can you explain to me your requirements for holding this meeting and who you are really responsible to notify.

MS. DEITZEL: We are required essentially to advertise the meeting in a locally-read paper. We advertised in both of the York papers -- the morning and the evening papers. We also, through the State, established the repository and provided the proposed plan to the Windsor Township Building.

As I explained to you, I think on the phone, we've had a number of moves in the agency and somehow the Modern file has been misplaced, so we didn't have access to our entire mailing list; but that is esentially what we're required to do -- to advertise in the most widely-read local newspapers, which were identified to us in the past as the York Dispatch and The Daily Record. We did advertise in both.

MS. RUBY: Are you not required to notify the municipality in which the landfill is located?

MS. DEITZEL: It was my understanding that they had been notified. I'm sorry if they weren't. Are

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you basically telling me that you weren't notified until yesterday when I contacted you?

MS. RUBY: Had I known that this meeting was going to be held -- We had a Township newsleter go out, and I certainly would have put this important meeting in the newsletter. We do have a citizens group that's greatly concerned about all aspects of the landfill as are the Board Supervisors.

MS. DEITZEL: Well, the ad appeared on, I believe, April 16. It should have appeared in both the morning and the evening papers. Did you see that ad?

MS. RUBY: No, I did not -- not until this evening when a resident showed me his copy.

MS. DEITZEL: It is a quarter-page display -retail display ad -- in the front section of the papers.

MS. RUBY: That was my main concern. probably would have filled this room had residents known about this meeting.

MS. DEITZEL: Well, when we select the newspapers, basically, we go back to the plan that did exist which was developed several years ago; but those papers were what were identified to us as being the most widely read.

MS. RUBY: When you decide on a course of action, will you notify the municipalities? Can we get a

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copy of whatever report or whatever recommendation you 1 2 finally decide upon? 3 MS. DEITZEL: You can -- and also the 4 Record of Decision itself, as well as the Responsiveness Summary which is what we'll be developing from the 5 transcript that we'll be receiving -- they will be put 6 7 in the repository. Anyone in the audience who wants a copy of 8 the complete record and the Responsiveness Summary when 9 they're completed is free to contact me, and we can mail 10 that directly to them -- and anyone else in the audience 11 who wants that. 12 MS. RUBY: On that period of thirty days --13 is that by law that you can only have --14 MS. DEITZEL: Yes. 15 16 MS. RUBY: Can you get an extension or can you request an extension, or can the public or a 17 municipality request an extension for the comment 18 period? 19 MS. DEITZEL: Yes -- you can request an 20 extension. 21 MS. RUBY: How would you go about doing 22 that? 23

evening, and we basically would have to go back to the

MS. DEITZEL: You can request it here this

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1	agency and determine Basically the way the law reads
2	it says "a timely request," so the decision is usually
3	made by the
4	MS. RUBY: I am not going to make a formal
5	request. I will bring this our Board of Supervisors
6	and perhaps they would like to make a formal request for
7	a time extension.
8	MS. DEITZEL: Thank you. Is there any
9	other comment? Any questions?
10	MR. SMITH: Yes. I'm Jim Smith, and I
11	have quite a few. The study itself who is that
12	performed by?
13	MS. DEITZEL: That was performed by a
14	contractor a responsible party contractor under the
15	supervision of PADER and the EPA.
16	MR. SMITH: Does that contractor have a
17	name?
18	MR. DAPPOLONE: That's Golder Associates
19	I believe is the name of the contractor.
20	MR. SMITH: And what is the contamination
21	levels that you found were they EPA tests, or were
22	they based on other tests done by Golder or who?
23	MR. DAPPOLONE: They were Are you
24	talking about the lab analysis part of it?

MR. SMITH:

Yes.

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1 MR. DAPPOLONE: All right. The tests 2 have to be done in accordance with FPA standard 3 procedures, and all of that is documented in the 4 remedial investigation report. 5 MR. SMITH: All_right. Were they done by 6 EPA labs or by third-party labs? 7 MR. DAPPOLONE: I could be almost sure 8 they weren't done by EPA labs, but there are labs who are contracted to perform tests according to EPA procedures. 10 MR. SMITH: Was there any off-site testing 11 done? 12 In terms of --MR. DAPPOLONE: 13 MR. SMITH: Wells. 14 MR. DAPPOLONE: Groundwater wells? Yes, 15 there were. 16 MR. SMITH: There were? 17 MR. DAPPOLONE: Yes. I don't know the 18 exact number and the locations. I don't have the 19 remedial investigation with me tonight. Ken Thornton 20 from the State is here. He may be able to help. 21 MR. THORNTON: Well, most of the 22 residential wells around the landfill were sampled at 23 least -- I'd say at least two or three times during the 24 course -- dating back to, I think, 1985; and subsequently, 25

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there's been a water line extended north to the Modern site -- and I think this was done in Lower Windsor Township, and there's an ordinance that all residents hook up to this water line. UNIDENTIFIED SPEAKER: Does it serve all the people? MR. THORNTON: It doesn't serve all the people in that area. MR. SMITH: I know of no homes to the east of (inaudible) that use ground water. MR. DAPPOLONE: I'm sorry. I didn't understand what you said. MR. SMITH: I know that no private wells were tested to the east that use private groundwater. MR. DAPPOLONE: I'm not sure. check on that for you. We can get back to you on any questions that we can't answer tonight. MR. SMITH: I read the plan originally -the plan that was developed, I guess, when the study was completed -- or what the study was based on -- and in that plan, if I understood it correctly, the

assessment was that no off-site water testing was going to be done.

MR. THORNTON: There are Modern wells all over the site that were tested, as well as the

residential wells. You have to understand that the groundwater -- when you look at groundwater, you look at it in terms of the groundwater basin where groundwater on the eastern side to some extent will not be affected, you know, from a certain area; so someone a mile or two to the east or north or south may not, depending on the groundwater -- what we call the groundwater divide is -- they may not be drawing water that is eminating from the site.

MR. SMITH: Well, the groundwater divide, if I understood your picture there, was rotated ninety degrees. The groundwater divide should run more south. There's a major land fault that runs east-west in the area.

MR. THORNTON: That's correct. Basically, what they've established during the hydogeologic investigation — that groundwater generally comes onto the site from the south and exits to the north. The one drawing that he has shown you up there — this would be the southern direction, and groundwater basically travels in this direction. The tributaries essentially establish the groundwater divide for the site so that topographically, you have hills there and the groundwater will not go past those; so groundwater is basically — you have your precipitation infiltrating down onto the

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landfill -- it percolates down through the soil into the 1 2 bedrock and then travels along fractures north, and exits the site into Kreutz Creek and adjacent 3 4 tributaries. MR. SMITH: (Question inaudible -- fan 5 running) 6 MR. DAPPOLONE: I'm not aware of that. 7 I'll certainly get with Ken after the meeting, and we 8 can get back to you with any information we find out. 9 MS. DEITZEL: We would need more than 10 just your name for us to get back to you. 11 MR. SMITH: Just two other quick things --12 When you said the only possibility of human hazard is 13 the consumption of subsurface water -- their air-strippers 14 (phonetic) that they use on their leachate treatment 15 system -- what is the cancer risk of airborne evaporated 16 BOC (phonetic)? 17 18 MR. DAPPOLONE: The air-strippers are 19 required to meet whatever requirements there are, both State and Federal, for -- there are standards for 20 air-strippers. Now, sometimes -- and again, I'm not 21 22. an air person -- I can get more detail for you. Sometimes

the requirements are based solely on risk standards and

other times they're based on standards such as drinking

water standards like the MCLs. I don't know what they are

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in the case of air-strippers.

MR. ALEXANDER: But basically, those air-strippers have been permitted along with the -obviously the landfill -- as part of the landfill system; but we've advised Modern Landfill that there's a new policy that's been developed by the Department, and that is that these air-strippers will meet the best available technology, which means that there will be some device installed onto the air-strippers that will capture any emission; but right now they are under current with the Department, but as a result of this and because of a permit upgrade, those emissions from the air-strippers will be addressed.

MR. DAPPOLONE: It is the best available technology based on a risk --

MR. ALEXANDER: No -- that is an engineering standard.

MR. DAPPOLONE: All right.

MS. DEITZEL: Are there any other questions?

MR. SMITH: It's just that alot of people

MR. ALEXANDER: Zero -- that's the --

basically what the engineering standard is -- zero.

MR. SMITH: I understand that. Alot of people, it seems, in our area have contracted cancer for

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whatever reason, and I'm curious if any cancer studies 1 have been done -- if cancer rate studies have been done 2 in our area. 4 MR. DAPPOLONE: Not that I'm aware of. The State might have more information. 5 MR. SMITH: Will these questions be 6 answered by the -- and resemble 7 MR. DAPPOLONE: Yes. 8 MS. DEITZEL: They will be addressed, yes. 9 MR. SMITH: I can't think of anything else. 10 MR. CARVER: My name is David Carver. 11 the President of the York County Industrial Development 12 I-have two questions. Number one, the Corporation. 13 third alternative, Alternative 2C, as I read it does not 14 speak to any impact the remedial action program would 15 have upon the rest of the site. Is this to be assumed 16 that the remedial action proposed will have no impact, 17 either negatively or positively, on the rest of the site? 18 MR. DAPPOLONE: I'm not sure what you mean 19 by the rest of the site. Would you explain that. 20 MR. CARVER: Well, to be specific, what 21 impact does Alternative 2C have upon residual waste 22 being received at the Modern Landfill? 23 MR. DAPPOLONE: All right. As far as we 24 know or are concerned, it has no impact; and again, I 25

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think as Carrie mentioned, that's not the focus of the meeting tonight.

MR. CARVER: I understand. The second alternative -- or the second question has to do with the alternative that -- the alternative makes the assumption that the 150,000 gallons of water per day from the ground -- in effect, it becomes the major protection in a sense for the citizens of the community by (inaudible) the leachate agents that would be in the water; and I wondered if -- is that a sufficient gallonage to be removed? Is that sufficient protection? Does the monitoring system require, for example, if two pumps that may be more critical than others were to go inoperable and be unable to produce -- say the gallonage drops to 70,000 gallons per day? Is that possible? What protection does the community have in terms of that groundwater (inaudible) flowing into their own private wells?

MR. DAPPOLONE: All right. Since this is done under consent agreement with the State, I'm going to defer to the State on this one, because I think it on the consent order, if I'm not mistaken.

MR. ALEXANDER: I think I understand your question. Basically, what you're saying is -- is the current system effective in containing those contaminants

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travelling from the site through the groundwater, and is there any possibility they could reach residential wells. Is that a summary of your question?

MR. CARVER: Yes.

MR. ALEXANDER: Yes. The system -- it has been been in place. There's been alot of tests done on the system to more or less fine tune it to the point where we know or think that there is an effective capture zone around that facility; and in addition to that -- well, how do you know that your system is actually working? Well, there's actually monitoring wells monitoring the effectiveness of the system; so there's wells established within the groundwater -- that any groundwater that would bypass that system is tested and analyzed and, to our knowledge, the system is effective and working. There's also sampling points in the tributaries, so we shouldn't be seeing any of the contaminants in the tributaries; and as far as we know, we don't.

MR. CARVER: How is the monitoring information made available to the folks in the community? Is it done on a regular basis? I guess what I'm driving at is how does 150,000 gallons per day -- that what you were saying is an appropriate level of water extraction? The water could be at a high point or low

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point -- and you say you've been monitoring over time, but it -- if you got to 200,000 gallons going through there, is 150,000 enough?

MR. ALEXANDER: The system collects -I'm mean, the system is going to collect essentially
what comes under its influence; and yes, it should be
enough.

MR. CARVER: Collects what's under its influence?

MR. ALEXANDER: That's correct.

MR. SMITH: Well, waste management is responsible for collecting and making samples of those samples, and then give to the Windsor Township Office which are available for public review. What they would show you is that those wells generally are getting more concentrated BOCs over the past three years. An example is vinyl chloride -- suppose the maximum contamination level was two and you showed 260 on your slide -- there's wells up there were monitored in June of 1990 with 660 parts per million -- like 300 times the safety level. They're showing gradual degradation of water quality. I don't think that says that the system is doing its job.

MS. DEITZEL: Are there other comments or questions? Yes?

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MR. GRAHAM: My name is Gene Graham. I'm a Supervisor of Lower Windsor Township. The first I knew about this meeting was this week, and I would like to, in my capacity, as for a rescheduling of the complete hearing system -- new public comment period and a new public meeting. I think what you've done here in respect to this is certainly inadequate, and the population was certainly uninformed as to --

MS. DEITZEL: I think the only comment I could make to that would be that we would have to take your request back to the Regional Office and run is past our --

MR. GRAHAM: I'll put it in writing to your office -- also to the appropriate Congressmen and Senators in Washington. I have several questions. First of all, how would the EPA select the alternative plan? Would it be a popularity contest? Will the results be determined by the amount of input?

MR. DAPPOLONE: Well, what we've shown in the proposed plan and what we've said here tonight is that our perferred alternative is what is identified as Alternative 2C. Unless we get other information that tells us that's not the alternative we should choose or that there are other modifying situations that, in all probability, would be our selected remedy. However, that

is the purpose of the comment period -- to solicit comments to see if this is -- if there is other information that we're not aware of that would influence the selection of the remedy.

MR. GRAHAM: All right. You ran over a number of studies and documents here this evening. How current are your studies as far as Modern Landfill is concerned?

MR. DAPPOLONE: The feasibility study is actually still in draft form; that's how current it is. The final feasibility study will be available in several days. The remedial investigation was completed just this past year.

MR. GRAHAM: Shouldn't have the whole study been made available to the public before any comment period was scheduled?

MR. DAPPOLONE: The entire study, including the draft feasibility study, was made available to the public; and the proposed plan mentioned that it is a draft feasibility study, and there are comments -- both EPA and Pennsylvania Department of Environmental Resource comments to the draft feasibility study available in the record.

MR. GRAHAM: All right. You admitted here this evening that your plan does not document the results

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1 of off-site well testings. How can your study be 2 complete with -- : -----3 MR. DAPPOLONE: I didn't say -- I said 4 I didn't have the remedial investigation with me to give 5 you the exact numbers and locations of all the wells. Apparently, the information supplied by the State is that there was some off-site well testing, but I can't 8 furnish that to you tonight. 9 MR. GRAHAM: All right. You based some 10 of your study on DER's comments and information which 11 apparently is not accurate or up to date. You've not identified any of these off-site -- and I just feel that 12 your study is incomplete. I think it should be completed 13 14 and made available in more detail to the public and given us proper notification of the comment period and 15 16 the meeting. 17 MS. DEITZEL: Are there any additional 18 comments or questions? (Brief pause) 19 - 20 MS. DEITZEL: There are no additional 21 comments. I'm going to adjourn the meeting. 22 (Meeting adjourned at 8:07 p.m.) 23 24

I hereby certify that the testimony taken by me in the within matter is fully and accurately indicated in my notes, and that this is a true and correct transcript of same.

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